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6 January 2006

Reference: Recommended Technical Revisions to the Waste Discharge Requirements and Fact Sheet in the draft NPDES Permit¹ to be Reissued to the MBCSD²

Dear Mr. Keogh:

Pursuant to your request³, we have reviewed selected portions of the referenced document. This letter report recommends revisions to the proposed NPDES permit, and provides detailed technical justification for the revisions based on unambiguous scientific analyses of two decades of intensive monitoring data. Most of these revisions have been suggested in previous communications to the USEPA and RWQCB staff. Given the demonstrable technical basis for the recommended changes, any changes that are not implemented in the final permit warrant a detailed explanation for their rejection. The recommended revisions are listed in order of importance, with the highest priority changes listed first. References to pertinent page numbers and sections in the proposed NPDES permit are italicized.

1. **Remove the requirement for Acute Toxicity Testing [Page E-10, Section E.A].** There is no technical or regulatory justification for requiring acute toxicity testing of MBCSD effluent. As stated in the fact sheet [Page F-22, Section F.V.7], the California Ocean Plan (COP) does not require acute toxicity tests for dischargers that achieve the dilutions achieved by the MBCSD discharge. The COP cites the need for acute toxicity testing only “...as necessary for the protection of beneficial uses of ocean waters.” There is no nexus between the protection of beneficial uses and the requirement for acute bioassays on MBCSD effluent samples. There are four reasons for this:
 - a) Acute testing is unnecessarily redundant with the chronic testing that is already required as part of the NPDES Permit. Chronic tests provide far more accurate and sensitive measures of effluent toxicity.⁴
 - b) Acute tests conducted on MBCSD effluent result in erroneous measures of toxicity that provide no insight into the actual toxicity of the discharge. Over two decades of acute testing have demonstrated

¹ US Environmental Protection Agency Region Region 9 (USEPA) and the California Regional Water Quality Control Board, Central Coast Region (RWQCB). 2005. *Joint Notice of Proposed Actions on Reissuance of Waste Discharge Requirements [NPDES Permit] to Discharge to the Pacific Ocean for the City of Morro Bay and Cayucos Sanitary District San Luis Obispo County*. Public Notice No. RB3-2006-0019, NPDES No. CA0047881. 19 December.

² The wastewater treatment plant jointly owned by the City of Morro Bay and the Cayucos Sanitary District (MBCSD)

³ Keogh, B. (personal communication) 2005. Telephone conversation between Mr. Bruce Keogh, MBCSD Wastewater Division Manager, and Dr. Douglas Coats, Senior Oceanographer, Marine Research Specialists (MRS) on 22 December 2005 and 5 January 2006, and in the Email on 3 January 2006. Mr. Keogh provided direction on which portions of the referenced NPDES Permit and accompanying Fact Sheet should be reviewed by MRS.

⁴ “Staff agrees that critical life stage tests are more sensitive indicators of receiving water impacts than acute toxicity tests.” State Water Resources Control Board. 2000. Division of Water Quality. Page 16 in: Draft Final Functional Equivalent Document Amendment of the Water Quality Control Plan for Ocean Waters of California. California Ocean Plan. September 1.

that the presence of ammonia in the MBCSD effluent samples severely compromises the accurate determination of acute toxicity.⁵

- c) Although ammonia interference causes the measurements to be significantly inflated, the acute toxicity levels of the MBCSD discharge reported over the last two decades have been less than half of the effluent limitation cited in the NPDES Permit. Consequently, even based on artificially inflated bioassay results, the discharge cannot be considered an acutely toxic threat to beneficial uses of receiving waters.
- d) The acute toxicity limit is intended to prevent lethality to organisms passing through the acute mixing zone. For the MBCSD discharge, the prescribed mixing zone is highly localized around the outfall, extending only 1.5 m (4.9 ft) from the point of discharge. At that location, the effluent is diluted more than 100-fold,⁶ and is 25 times more dilute than the effluent tested in the bioassays. The only conceivable beneficial use that could be impacted would be fishing. However, finfish are likely to avoid the turbulent discharge jet. Additionally, acute bioassays continuously expose organisms to high effluent concentrations over a four-day period. Clearly, they do not reflect the brief duration of any potential finfish exposure to dilute concentrations of MBCSD effluent.

2. Require surfzone sampling only when effluent coliform densities are elevated [Page E-13, Section E.VI.A]. The proposed NPDES Permit requires the collection and analysis of surfzone samples on a periodic basis. Instead, surfzone sampling should only be required when effluent total coliform bacteria tests exceed 2,400 MPN/100 mL. Once triggered, surfzone sampling should continue on a daily basis until the effluent total coliform concentration returns to compliance. The rationale often proposed for periodic surfzone sampling in other NPDES permits⁷ is that “*Surf-zone monitoring provides a public service....*” However, this rationale does not apply to the MBCSD discharge because it is in direct conflict with the Clean Water Act (40 CFR 125.63a), which requires that the scope of 301(h) monitoring programs be “*...limited to include only those scientific investigations which are necessary to study the effects of the proposed discharge.*” Triggered surfzone monitoring satisfies this requirement; regular periodic monitoring, as currently specified in the proposed NPDES Permit, does not. Two decades of monitoring data demonstrate that periodic surfzone monitoring does not lend insight into the MBCSD discharge for the following reasons:

- a) Disinfection of effluent prior to discharge is highly effective at reducing bacterial densities to levels below the limits established for beneficial use. Thus, at the end of the treatment process, the effluent already typically meets the bacterial standards for ocean waters. Because of this, the EPA Tentative Decision Document⁸ states that “*...shoreline contamination by way of the applicant's discharge is not of reasonable concern.*”
- b) Rapid dilution of effluent by more than 133-fold shortly after discharge reduces even moderately high bacterial densities⁹ to non-detectable levels within a few meters of the discharge point. Clearly,

⁵ MRS. 2003. Page III-29 in: *MBCSD, Supplement to the 2003 Renewal Application for Ocean Discharge Under NPDES Permit No. CA0047881*. Prepared for the MBCSD, Morro Bay, CA. July.

⁶ MRS. 2005. *MBCSD, Offshore Monitoring and Reporting Program, Water Column Sampling, October 2005 Survey*. Prepared for the City of Morro Bay, Morro Bay, CA. November.

⁷ RWQCB. 2002. Staff Report for Regular Meeting of April 19, 2002. Item: 10 Subject: *Reissuance of Waste Discharge Requirements, National Pollutant Discharge Elimination System Permit No. CA0048160*, for Goleta Sanitary District's Wastewater Treatment Plant, Santa Barbara County--Order No. RB3-2002-0021.

⁸ USEPA. 2005. Page 23 in: Letter from W. Nastri, Regional Administrator of the USEPA in regard to the *MBCSD's application for a modified NPDES permit under Section 301(h) of the Clean Water Act, Tentative Decision of the Regional Administrator Pursuant to 40 CFR Part 125, Subpart G*. 10 September.

⁹ At a minimum, a concentration of 268 MPN/mL in the effluent would be diluted to 2 MPN/mL well within the 15 m zone of initial dilution. Far greater dilution is expected based on actual measurements of dilution achieved by the outfall.

surfzone samples are too distant¹⁰ from the discharge to lend any insight into potential discharge-related impacts from anything but the very highest bacterial densities in the effluent.

- c) In contrast to bacterial densities in effluent samples, surfzone samples are often elevated due to onshore runoff. This and other non-point source contamination severely compromises any determination of the potential influence from the effluent discharge.
- d) The periodic surfzone monitoring effort specified in the NPDES Permit duplicates sampling already conducted by the San Luis Obispo County Department of Health.

3. Remove all statements that imply past exceedances of permit limits are somehow related to less-than-secondary treatment standards. [Page F-11 and F-12, Section F.IV.A.4]. None of the specious relationships between treatment levels and violations outlined in the Fact Sheet of the NPDES Permit are based on fact.

- a) The record of violations associated with other treatment plants within the region shows that there is no relationship between permit violations and treatment level. In fact, plants that attain full secondary or even tertiary treatment levels have more than ten-times the number of violations of the MBCSD plant in the past five years.¹¹
- b) The MBCSD effluent often meets or exceeds secondary treatment standards, so it is misleading to suggest that the limited reduction in the suspended solids concentration achieved by conversion to full secondary treatment would suddenly eliminate all future exceedances of permit limits. Instead, the exceedances largely occur because of unavoidable mechanical malfunctions of equipment. In place of these specious arguments, it is reasonable to suggest that many years from now, when the major components of the treatment process approach the end of their useful life, an increase in permit exceedances might be expected.
- c) The discussions associated with the exceedances erroneously imply that occasional non-compliance with the effluent limitations in the NPDES Permit is the only consideration for the permit renewal. In fact, the ability to routinely meet water-quality standards promulgated in the California Ocean Plan (COP) is the primary consideration. The intensive monitoring associated with the MBCSD discharge has consistently demonstrated that the discharge regularly achieves the required receiving-water standards, yet, there is no mention of this fact in the Fact Sheet.
- d) The following erroneous statements concerning the exceedances require correction for the reasons indicated:
 - i) [Page F-11, Section F.IV.A.4] *~~"The reported dioxin concentration value was 0.56 pg/L, 8% greater than the effluent limit. This exceedance was much smaller than the 20% instrumentation calibration standard. The Dischargers state the particular dioxin congener that was responsible for the violation is ubiquitous in the environment and was present in the influent to the treatment plant. The Dischargers also stated that the violation could be attributed to laboratory contamination, which is commonplace when measuring concentrations at sub-parts-per-quadrillion. Staff suspects the dioxin could have been formed in the disinfection process of the treatment plant, where a relatively high concentration of organic matter is combined with a high dose of chlorine."~~* The last statement is incorrect because neither the solids concentration nor the chlorine dose at the time of the dioxin measurement was particularly high relative to other effluent samples, when dioxin measurements were well below the permit limit. The Fact Sheet fails to point out the fact that the excess 8% is well below the 20% resolution of the chemical

¹⁰ The discharge lies 840 m from the shoreline.

¹¹ In the last five years, the Pismo Beach treatment plant had 184 violations, the California Men's Colony had 143 violations, and San Simeon had 57, as reported in The Tribune article, *Aging sewage systems foul up*, published on 29 May 2005.

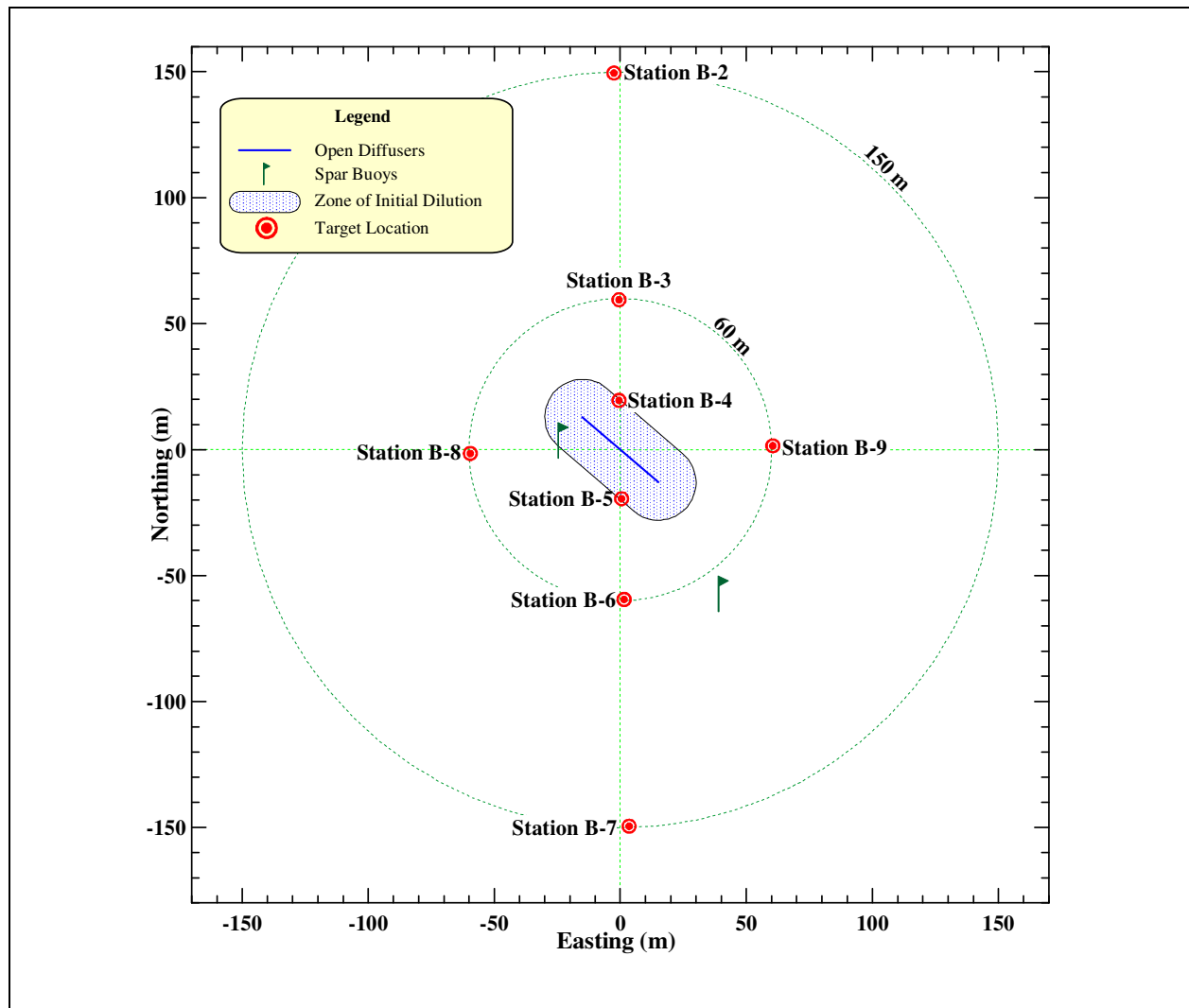
assay. Finally, the MBCSD never stated that the dioxin was present in the influent, although this is a plausible assumption given that drinking water is also often chlorinated.

- ii) [Page F-11, Section F.IV.A.4] ~~“Notably, this violation might not have occurred had the facility been designed to meet secondary treatment standards, because a solids removal system in the chlorine contact chamber would not likely be necessary.”~~ This statement is incorrect because the solids removal system in the chlorine contact chamber has nothing to do with secondary treatment. Instead, it has to do with the fundamental redesign of facility in 1985. Certainly, a new facility could be designed so that solids would not accumulate in a tank that was originally designed as a clarifier, but that could be accomplished without achieving secondary treatment. Even so, solids would accumulate somewhere in the process. Conversely, even if the suspended solids concentrations were to meet full secondary treatment standards, which the effluent has for 17 of the last 23 months, solids would continue to settle in the contact tank.
- iii) [Page F-12, Section F.IV.A.4] ~~“Again, these violations might not have occurred had the facility been designed to meet secondary treatment standards, because solids would not be present in the chlorine contact chamber at levels that would alter the chlorine dosing process. (Similar problems have not occurred at facility’s that meet secondary treatment standards.)~~ Again, this statement is blatantly incorrect. The violation was caused by the design of the sampling device that controlled the chlorination/dechlorination process, and had nothing to do with the suspended-solids load. The sample-supply line was subsequently redesigned to improve flow and filter screens are now cleaned more often. These changes eliminated the sampling problem and chlorine violations have not occurred since. According to representatives from other treatment plants, identical sampling devices at full-secondary and tertiary facilities require the same type of maintenance regimen.¹²

4. **Remove cross-shore benthic monitoring stations B-8 and B-9 [Page E-3, Section E.II] and add replicate sampling for composite chemical analyses at the remaining stations [Page E-14, Section E.VII.A].** The locations of cross-shore Stations B-8 and B-9 are shown in the figure on the next page.¹³ These stations were added in the last permit but were subsequently found to be heavily influenced by natural depth gradients. The depth-related differences at these stations mask potential discharge-related impacts and render the data at these stations of little use. In exchange for the reduced monitoring effort at these cross-shore stations, the grab sample replication should be increased at the remaining (along-shore) stations. Variability in trace-metal concentrations significantly increased after replicate grab sampling was dropped in the current permit’s monitoring program. Consequently, chemical analysis of a composite of three replicate grab samples at Stations B-2 through B-7 should be reinstated to stabilize the determination of chemical concentrations. To implement this requirement, the last sentence in the last paragraph on page E-14 should read: “~~A grab sample~~ Three grab samples shall be collected using a 0.1 m² Van Veen grab sampler at all benthic monitoring stations, and analyzed at each benthic monitoring station. A composite of these three samples should be analyzed as follows:”

¹² MBCSD. 2003. Personal communication between Mr. Les Girvin, MBCSD Treatment Plant Supervisor, and Mr. Gary Masters, San Elijo Joint Powers Authority, a water reclamation facility, regarding maintenance of the Wallace & Tiernan Micro 2000 Total Chlorine Residual (TRC) analyzers.

¹³ The figure in the draft NPDES permit [Page E-3, Section E.II] does not show the location of Stations B-8 and B-9, although they are listed in the table of benthic monitoring locations.



5. Footnote the annual minimum frequency of analysis in the effluent monitoring requirements for the protection of human health to state that *“After results are reported, the Discharger may request to the Regional Board and EPA that only those parameters detected during the first year of sampling be analyzed during the remainder of the permit”* [Pages E-6, E-7, and E-8, Section E.IV.A]. Adding this footnote is consistent with other 301(h) NPDES discharge permits in the region.¹⁴ Moreover, quantitative analyses of a decade of effluent measurements has definitively demonstrated that the MBCSD discharge has a high compliance potential for the chemical constituents currently monitored on a semi-annual basis.¹⁵ The results from this reasonable potential analysis should be included in the rationale for changes to the effluent monitoring frequency [Page F-22, Section F.V.8] as follows: *“None of these priority pollutants were detected in effluent by the several sampling events during the life of the*

¹⁴ USEPA and RWQCB. 2004. Monitoring and Reporting Program No. R3-2004-0129, NPDES Permit No. Ca0048160, Waste Discharger Identification No. 3 420102001, Proposed for Consideration at the October 22, 2004 Meeting for Goleta Sanitary District Wastewater Treatment Facility, Santa Barbara County. Draft for Meeting of November 19, 2004.

¹⁵ MBCSD. 2004. Letter from Mr. Bruce Keogh, Wastewater Division Manager, MBCSD to Mr. Matt Thompson, RWQCB. Subject: *Submittal of quantitative documentation in support of reductions in the monitoring frequency for chemical contaminants with the MBCSD effluent.* 19 July.

~~existing~~ Quantitative statistical analysis of a large number of historical contaminant measurements demonstrates that there is a low potential for non-compliance, and that the proposed effluent-monitoring reductions are warranted. ~~This historical performance, and the cost of this the monitoring justifies the this monitoring-frequency reductions. Effluent monitoring for those priority pollutants which were detected during the life of the existing Permit remains the same.~~

6. **Change the minimum sampling frequency for effluent metals from semi-annually to annually [Page E-5, Section E.IV.A].** Analysis for effluent metals should conform to the annual sampling frequency required of other priority pollutants. The fact that metals have been detected in past effluent samples does not provide an adequate rationale for the semi-annual sampling frequency. The statement concerning the reductions in monitoring, “*Effluent monitoring for those priority pollutants which were detected during the life of the existing Permit remains the same.*” [Page F-22, Section F.V.8] suggests that because a compound has been detected historically, it has a potential for non-compliance. However, such an approach provides no comparison between a concentration that is environmentally significant and the detectable concentration, which is largely a measure of a laboratory’s analytical ability. In fact, trace metals differ from other priority pollutants because they occur naturally in the environment at detectable levels. Some are even required by organisms as nutrients. The fact that they occur naturally in the environment should not be a reason to intensify monitoring. On the contrary, the reasonable-potential analyses of historical effluent measurements has definitively demonstrated that the potential for future compliance for metals concentrations is high, and that annual sampling is sufficient to demonstrate continued compliance with the COP.¹⁶
7. **Reduce the number of initial chronic screening tests from “...no fewer than three tests” to “...no fewer than two tests” [Page E-11, Section E.V.B].** Ostensibly, multiple screening tests are conducted to account for potential effluent variability. However, MBCSD effluent varies semiannually, and requiring more than two semiannual tests is redundant. There is no regulatory basis for the three-test requirement because the COP does not specify the length of an initial screening period for chronic tests. The proposed duration of two tests is reasonable and conforms to the intent of the COP.
8. **Replace the seventeen instances of the statement “The discharge shall not cause...” with “Wastewater constituents within the discharge shall not cause.” [Pages 15 and 16, Sections V.A, V.B, V.D, V.E, V.F, V.G, V.H, V.I, V.J, V.K, V.L, V.M, V.N, V.O, V.P, V.Q, and V.R].** This change is consistent with the intent of the COP and is particularly important for the MBCSD discharge because, on occasion, the naturally occurring bottom seawater that is entrained in the buoyant effluent plume has different properties from shallower receiving waters. Receiving-water changes in suspended solids, dissolved oxygen, and other constituents that result from the movement of ambient seawater should be distinguished from those caused by the presence of effluent constituents.
9. **Remove the requirement for testing dissolved-sulfide concentrations in benthic porewater samples [Page E-15, Section E.VII.A, Line 3 of Sampling-Frequency Table and Footnote 18; Page F-15, Section F.IV.B.5, Last Sentence of the 1st full Paragraph; Page F-22, Section F.V.II].** The additional year of sampling required in the footnote for elimination of sulfide sampling has already been conducted, and the stated requirement has been met. The MBCSD has performed the high-resolution sulfide analysis on porewater samples on three separate sampling occasions, in 2003, 2004, and 2005. None of the 27 samples contained detectable sulfide concentrations. Moreover, elevated sulfide concentrations in porewater are usually restricted to quiescent marine and estuarine environments, where there are high concentrations of organic constituents. Often these benthic environments are also hypoxic. This is not the case for the coarse sand sediments surrounding the MBCSD outfall, which are intensively reworked by waves and currents.

¹⁶ MBCSD. 2004. *Op. cit.*

- 10. Revise the locations of the surfzone monitoring stations to conform to historical measurement locations [Page E-2, Section E.II].** The coordinates of the surfzone monitoring locations provided in the monitoring-location table in the permit do not coincide with the along-shore distances cited in the same table. Moreover, neither the coordinates nor the along-shore distances coincide with the precise locations where surfzone samples have been collected over the past two decades. These inconsistencies only became known after analysis of detailed navigational data collected during a recent shoreline survey. The revised surfzone monitoring stations should be as follows:

SZ-A1	Upcoast Reference	35° 23'58" N	120° 52'07" W	1330 m (4363 ft) N
SZ-A	Upcoast Midfield	35° 23'45" N	120° 52'04" W	912 m (2992 ft) N
SZ-B	Upcoast Nearfield	35° 23'31" N	120° 52'00" W	488 m (1602 ft) N
SZ-C	Onshore of Diffuser	35° 23'15" N	120° 51'57" W	0
SZ-D	Downcoast Nearfield	35° 23'02" N	120° 51'55" W	426 m (1398 ft) S
SZ-E	Downcoast Midfield	35° 22'46" N	120° 51'54" W	922 m (3026 ft) S
SZ-F	Downcoast Reference	35° 22'24" N	120° 51'53" W	1602 m (5250 ft) S

- 11. Clarify the requirement that “Dilution and control water should be obtained from an unaffected area of the receiving waters” [Page E-II, Section E.V.B].** The statement should be modified to specify “Dilution and control water should be obtained from an unaffected area ~~of the receiving waters~~ of the open ocean along the Pacific coast.” Otherwise, the statement could be incorrectly interpreted to mean that dilution and control waters used in the chronic bioassays need to be collected from the region around the outfall. That would be an onerous and unnecessary requirement. In contrast to discharges within enclosed bays, the receiving waters of the open ocean are relatively uniform and there is no advantage to collecting seawater near the outfall, as opposed to seawater collected in the open ocean near the toxicity testing facility.
- 12. Focus the discussion of toxoplasma and sea otters [Page F-19 and F-20, Section F.IV.B.8].** The discussion provided in the Fact Sheet under Section F.IV.B.8 misrepresents the potential for impacts from the MBCSD discharge, and fails to clearly state, at the beginning of the discussion, the empirical fact that the MBCSD discharge is not responsible for the observed toxoplasmosis in the local sea otter population. In particular, it does not fully discuss the implications of mussel-testing results, which unequivocally demonstrate that the MBCSD discharge cannot be the source of *Toxoplasma gondii* infection in sea otters. The Fact Sheet also fails to point out that the mussel analyses determined that the MBCSD discharge does not contain other bacterial pathogens such as *Campylobacter*, *Clostridium perfringens*, *Plesiomonas shigelloides*, *Salmonella*, and *Vibrio* spp. (*cholerae*, *parahaemolyticus*, etc.). Additionally, the Fact Sheet cites research published by Miller et al¹⁷, but does not discuss the implications of their finding that “...seropositivity to *T. gondii* was not significantly associated with ...proximity to sewage outfalls ($P=0.955$) but was highly correlated with freshwater flow ($P<0.001$).” This finding clearly demonstrates both the overwhelming influence of non-point source contamination, and the lack of influence from wastewater discharges. The rest of the toxoplasmosis discussion in this section of the Fact Sheet is either not pertinent to this NPDES permit, is highly speculative, or has since been proven wrong. Consequently, the last full paragraph on Page F-19 should be eliminated from the Fact Sheet in its entirety. In particular, discussing the details of the high toxoplasmosis infection rates in otters near Morro Bay is unwarranted given that they are unrelated to the discharge. Similarly,

¹⁷ Coastal freshwater runoff is a risk factor for toxoplasma gondii infection of southern sea otters (*Enhydra lutris nereis*). 2002. Miller, M.A., I.A. Gardner, C. Kreuder, D.M. Paradies, K.R. Worcester, D.A. Jessup, E. Dodd, M.D. Harris, J.A. Ames, A.E. Packham, and P.A. Conrad. International Journal for Parasitology 32(2002) 997-1066.

discussing early speculation that high infection rates might be related to “...*the only discharge with a 301(h) Waiver in the studied area,*” is clearly unfounded since, as stated later in the Fact Sheet, “... *the subject discharge is not a source of T. gondii loading to Estero Bay.*”

13. **Remove tributyltin as a monitoring constituent [Page E-6, Section E.IV.A].** Tributyltin was eliminated from the effluent monitoring program in the current permit because it has never been detected in MBCSD effluent. Also, its use is now restricted within the U.S. and it is not a likely constituent of MBCSD effluent. Instead, its distribution in the marine environment is primarily linked to its use as an anti-fouling additive to bottom paint on large ships, and detectable levels tend to be associated with relict contamination within the seafloor sediments of very large harbors.
14. **Revise the description of the effluent sampling location [Page E-2 (Section E.II)].** The effluent sampling location should not coincide with the location of the offshore diffuser structure, as it is currently listed in the NPDES Permit. Instead, effluent samples are collected at the air-relief structure, which is located onshore within the confines of the treatment plant at 35° 22' 47"N, 120° 51' 40"W. This location is downstream of any in-plant return flows or disinfection units, and is the last access point before the wastewater flows into the outfall.
15. **Modify and move the following statement to a footnote on the appropriate constituents: “The mass based goals determined from the 99th percentile of historical effluent concentrations and a flow of 2.06 MGD” [Page E-8, Section E.IV.B].** The statement is unclear as originally written. It should be replaced by “The performance-based mass emission goal was determined from the 99th percentile of historically detected effluent concentrations, and a flow of 2.06 MGD.” It should be a footnote on the following nine constituents: arsenic, copper, zinc, total cyanide, toluene, benzene, chloroform, halomethanes, and tetrachloroethene.
16. **Provide a footnote to “Effluent Limitations” stating that “The daily mass emission calculations are based on the average design flow rate of 2.06 million gallons per day (MGD).” [Page 11, Section IV.A].** Normally, mass emissions would be based on the effluent peak seasonal dry weather flow of 2.36 MGD that is stated in Section IV.A. However, in this version of NPDES Permit, the mass emissions are computed from the average design flow rate. This results in more restrictive limitations on mass emissions. This fact should be clarified in a footnote. Otherwise, the computed mass-emission limitations might be thought to be in error.
17. **Remove the statement concerning the predictive ability of the monitoring and reporting program (MRP) [Page 6, Section II.K].** The finding, “*The MRP is not capable of predicting future impacts to water quality and beneficial uses resulting from significant increases in pollutant loading,*” is inappropriate and misleading. First, it adds nothing to an assessment of the MRP based on its intended use because “...*significant increases in pollutant loading*” are not proposed as part of this permit. Second, it is misleading because the intensive and well-designed monitoring program is capable of detecting small increases in pollutant loading, and is capable of detecting potential discharge-related impacts regardless of their cause. In accordance with its intent, the MRP acts as a sentinel for untoward influences from the discharge, thereby allowing timely implementation of corrective actions that limit potential “...*future impacts to water quality and beneficial uses....*”
18. **Qualify the discussion of TSS exceedances [Page F-10, Section F.IV.A.1].** As written, the statement concerning the TSS exceedances imply they are a regular occurrence. This is not the case, and the following statement should be qualified as indicated: “...*thus the long-term average effluent TSS concentration is far below these limitations. However, these limitations were violated on three related occasions during a brief period in 2002. Since 1998, there have been no other exceedances of the TSS limit.*”

19. Augment the statement concerning biosolids in the facility description [Page F-3, Section F.II.A].

The biosolids statement should be augmented to read: "Historically, ~~b~~Biosolids have been ~~are~~ anaerobically digested and dried, composted, and then trucked to the San Joaquin Valley for use as a soil conditioner. However, in the past two years, the MBCSD has successfully implemented a composting operation at the treatment plant that will allow beneficial reuse of biosolids locally."

20. Remove the two-sentence preamble to the section on Receiving Water Limitations [Page 15, Section V].

In its current form, the statement is ambiguous and unnecessary. It states, "*Receiving water quality is a result of many factors, some unrelated to the discharge. This permit considers these factors and is designed to minimize the influence of the discharge to [on] the receiving water.*" This statement ambiguously implies that the permit considered factors unrelated to the discharge to minimize its influence. The statement adds nothing to the rationale for receiving-water limitations.

Please contact the undersigned if you have questions regarding these recommended revisions.

Sincerely,

Douglas A. Coats, Ph.D.
Program Manager